Clinical Section

*The Obstetrical Forceps

By

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The discovery of the obstetrical forceps was, in relation to childbirth, as important as Watt's discovery of steam to the industrial world. It was developed from the now obsolete vectis by the Chamberlens who for well over a century kept the secret within the family. William Chamberlen, a Hugenot physician, fled from France to England in 1569. Two of his sons, both named Peter, studied medicine and practised midwifery in London. The forceps was invented by the older Peter, and the secret handed on to the younger Peter and his sons, in particular to Dr. Peter Chamberlen who attained considerable fame and wealth. His son Hugh in 1670 attempted to sell the family secret to Mauriceau, the leading French obstetrician, who requested him to try his method of delivery on a rachitic dwarf already three days in labour. Chamberlen failed and Mauriceau refused to purchase. In 1699 Chamberlen sold the secret to Roonhuysen of Holland. It was this Hugh Chamberlen who attended the consort of King James II in 1688 when the Old Pretender was born. By the middle of the 18th century knowledge of the forceps was widely diffused through civilized Europe.

In 1813, four pairs of the original Chamberlen forceps were discovered in the garret of a country house which had belonged to Dr. Peter Chamberlen. One of these resembles an old forceps in the possession of the Manitoba Medical College, in being short and possessing only a cephalic curve.

Levret of Paris (1747) and Smellie of London (1751) independently added the pelvic curve which increases the adaptability of the instrument when the foetal head lies at a higher level than the outlet. The present day French forceps is much like Levret's instrument and the English forceps with its mortice and tenon lock derives from Smellie's instrument. Sir James Y. Simpson of Edinburgh improved the English forceps, and his design is widely used at the present day.

As obstetricians became more skilled and daring, the indications for the use of forceps were increased and the instrument was applied to the head even before the greatest diameter had passed through the inlet, the high forceps operation. It was soon found that owing to the rigid handles, traction could not be made in the axis of the pelvis and much force was required to draw the head through the pelvic curve. Attempts were made to remedy this defect by applying tapes to the blades, but it was not until 1877 that Tarnier of Paris solved the problem by attaching a movable rod to each blade and connecting them with a traction bar. The importance of his invention was soon recognized and there are few obstetricians or obstetrical clinics today that do not possess at least one axis-traction forceps. In recent years the Kielland forceps of bayonet type with a very slight pelvic curve, and designed for application to the head at the inlet, has been widely used.

Indications for the use of the forceps are either maternal or foetal. Maternal indications include failure of the maternal powers to effect delivery, either because of deficient forces or disproportion between the foetus and birth canal, and conditions such as heart disease, active tuberculosis or eclampsia, in which it is desirable to shorten the second stage as much as possible. Foetal indications are distress of the foetus as indicated by a foetal heart rate below 100 per minute between pains, or above 160, irregular and faint heart action, tumultuous movements, discharge of meconium in a vertex presentation, and prolapse of the cord.

Though several properties or qualities have been attributed to the forceps, there are, in reality, only two, traction and rotation. Of these, the former is by far the more important. Traction should be intermittent, and, if possible, coincident with the patient's pains. It should be made only with the flexed forearm. It is by skill, not strength, that women should be delivered when the forceps is applied. Any excess of force is likely to cause injury to mother or babe, or both. Though the teaching in the obstetrical department of this university is to employ manual rotation there are many obstetrical authorities who recommend and practice rotation with the forceps when the head fails to rotate naturally. If the ordinary type of forceps is used, the Scanzoni manoeuvre with the double application of the blades should be employed, but if forceps without a pelvic curve or the Kielland forceps is used the double application is not necessary. De Lee points out that properly the forceps should be used to produce, not a rotatory, but rather a spiral or turbinal movement.

It was William Smellie who first laid down definite rules for using the forceps, and the conditions to be fulfilled before the forceps is used, and these rules published in 1779 are still valid. "The forceps," he says, "if possible, should pass along the ear, because in that case, they seldom or never hurt or mark the head." Again, "the forehead ought always to be turned into the hollow of the Sacrum, when it is not already in that position. When the operator cannot exactly distinguish the position of the head, let him introduce a finger between the Os pubis and the head, and he will frequently find the back-part

* Read before the Post-Graduate Group, February 18th, 1937.

of the neck or one ear at the fore-part, or towards the side of the pelvis.'' A candidate at a recent examination of the Medical Council of Canada replying to a question as to the conditions to be met before forceps could be employed, said that it was the A.B.C. of obstetrics, i.e., *Anterior position of the occiput; Bladder and rectum empty; Cervix fully dilated.* You will agree that was a good answer. In addition the patient should have her hips across the end of the table or the edge of the bed with her thighs flexed, the membranes should be ruptured, there should not be too great disproportion between the head and the parturient canal, and the head must be engaged, that is, it must not be movable above the pelvic brim. Some authorities add that the foetus must be living, otherwise some operative measure such as craniotomy should be employed as being safer for the mother. Forceps should not be applied to a hydrocephalic head, either before or after perforation.

The forceps may be applied to the vertex when the occiput presents, or in a face presentation when the chin is anterior, or to the after-coming head in a breech presentation. It should never be applied to the breech or to a brow presentation. According to the station of the head in the birth canal, we may have a low, mid or high forceps operation. In the low forceps operation the head is presenting at the vulva, and the biparietal diameter is at the level of the ischial spines; in the mid operation, the biparietal diameter has passed through the brim but is above the level of the ischial spines, while in the high operation, while the head is fixed at the brim the greatest engaging diameter has not passed through the brim. As rotation of the head is usually completed only when the head strikes the pelvic floor, it will be evident that in mid and high forceps operations the head will not be completely rotated to the front, and consequently in addition to the difficulties entailed by the higher station of the head there is added the difficulty of completing rotation and of applying the blades accurately to the sides of the head. In the case of the high forceps operation, the risks to mother and babe are so great that the operation should be done only when it is imperatively called for and then it should be done by an expert. In many instances internal version or caesarean section will be safer than the high forceps operation. The forceps should never be applied to a floating head. The greatest width between the blades of the forceps should not be less than three inches.

While the instrument is indispensable in obstetric practice, its use should not be abused. Munro Kerr thinks there is an enormous abuse of forceps. He states that the forceps in some clinics is not used in more than 2.5 per cent of deliveries and need not exceed 6 to 8 per cent. at the very utmost. In an analysis of cases delivered on the public wards of the Winnipeg General Hospital during the years 1923 to 1932 inclusive, when the operation was not infrequently done for demonstration purposes, the forceps rate was 7 per cent. Dr. John A. Urner, Associate Professor of Obstetrics in the University of Minnesota, in an address delivered before the Winnipeg Medical Society in March, 1936, from an analysis of forceps deliveries at the Minneapolis General Hospital showed that women delivered with forceps had a definitely higher mortality and morbidity rate than those delivered spontaneously, and that the risk was least in the low operation, greater in the mid operation and greatest in the high operation.

Injury to the foetal head can be avoided by applying the forceps only when the proper indications are present and the proper conditions met; by applying the forceps only over the parietal and malar eminences where the head is best adapted to resist pressure; and by intermittent traction. The bones of the foetal vertex are sometimes so thin that they may be dented by the pressure of the finger, yet they are the only protection to the delicate brain underneath, and the connective septa may readily be overstretched so as to produce rupture of a vessel with intracranial haemorrhage.

If there are urgent indications for delivery with the forceps, and the cervix is not completely dilated or cannot readily be pushed up over the head, Duhrssen's incisions into the cervix may be made, and these may be sutured after delivery is accomplished. A well planned episiotomy often renders a forceps operation easier. The episiotomy incision may be repaired in the interval between the birth of the baby and of the placenta.

It must never be forgotten that in anterior positions of the occiput the head must be pushed down until the nape of the neck engages under the pubic arch. Consequently if the forceps is applied to the head which has not already descended to this level the line of traction should be downward and backward. This is easily done when the axis-traction forceps is used and the directions for the particular instrument followed, but it is difficult with forceps of the Simpson type unless the Saxtorph or Pajot manoeuvre is employed. In this, strong downward pressure is made with the left hand over or anterior to the lock while traction outward and upward is made with the right.

In the event of an oblique application over the head, one blade may impinge upon the facial nerve as it emerges from the stylo-mastoid foramen. The result will be a facial paralysis, which, fortunately, is only temporary in the great majority of cases. Sometimes it is impossible to avoid an oblique application, but in many instances the exercise of greater care would enable a correct application and prevent a mishap which is apt to alarm the mother.

To be successful with the forceps, the obstetrician should possess a conscience which will allow him to use the instrument only when a proper indication is present, and the conditions are fulfilled. It is not correct to terminate labour merely to save the doctor's time. The old surgical

principle, not to do harm, should be ever before him. If intervention with the forceps is decided upon, he should possess the mind of an engineer, i.e., he must have a clear understanding of the mechanical principles involved, and an educated sense of touch which will enable him at all times to know the position of the presenting part, its station and the extent of rotation. Lastly he should always remember in doing the operation that a powerful and rigid instrument has in its grasp, with only the slight protection of the scalp and cranium, the marvellously complex and delicate brain, so that even a slight error in judgment or excess of force may result in the death of the child from haemorrhage or asphyxia or worse still, in the birth of a child who later develops Little's paralysis, epilepsy or idiocy.—"Not by strength but by skill," is a motto to be recalled when the forceps is applied.

The Anaemias of Pregnancy

By

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It has long been recognized that anaemia of varying degrees of severity may arise during pregnancy, quite apart from such factors as haemorrhage, infection, or pre-existing anaemia. Until very recent years no adequate explanation for such anaemias was known, and therefore classification was not possible, and therapy was in most cases quite unsatisfactory. However, in the light of modern researches on the mechanisms of normal blood formation and a study of the modifications of such mechanisms brought about by the pregnant state, we are now able to classify and treat these anaemias according to their underlying cause.

From the etiological point of view we may group all anaemias into three main classes:—

(1) *Dyshaemopoeitic*—Those arising from some disturbance of normal red cell formation.

Such a disturbance may arise from a deficiency of certain substances which are necessary for the manufacture or maturation of red blood cells. Thus, if iron is not supplied in adequate amounts in the diet, or if it is poorly absorbed, or is lost from the body; anaemia characterized by deficient haemoglobin may arise. The cells will be little reduced in number, but will be smaller than normal and contain little haemoglobin. These anaemias are the *hypochromic, microcytic* types which respond to adequate dosage with iron. They occur chiefly in middle-aged women and are usually accompanied by achlorhydria—whether lack of HCL is responsible for the non-absorption of iron, or deficiency of some other factor in gastric juice is not definitely known. Frequently in such patients there is a history of a diet low in animal protein and iron-rich foods, or of frequent child-bearing. Similar anaemias arise where a diminished thyroid secretion exists, and in Vitamine C deficiency.

Secondly, if there is a deficiency of the antianaemic factor contained in liver—a deficiency which may arise due to a lack of intrinsic factor in the gastric secretion as occurs in pernicious anaemia; or if the extrinsic factor is lacking from the diet as in Tropical Nutritional anaemias; or if the antianaemic factor resulting from the interaction of these two substances during gastric digestion is improperly absorbed or stored, as in certain intestinal diseases, etc.—the bone marrow is unable to form mature red cells, and an anaemia of the pernicious type arises. In all such cases the blood picture exhibits a macrocytosis—the red cells are greatly diminished in number, but each is larger than normal and carries a greater load of haemoglobin. Macrocytic anaemis of this type react specifically to liver therapy.

Again blood formation may be depressed by such *toxic* and *metabolic* factors as chemicals, X-ray, nephritis, carcinoma, etc., and due to such influences the marrow may become completely inactive when an aplastic anaemis may result.

(2) *Haemolytic*—The second class of anaemias are those due to haemolytic agents. These may be of a chemical or infective nature or may arise from such intrinsic influences such as abnormal fragility of red cells, haemolysins, etc.

(3) *Haemorrhagic Anaemias.*

Now before applying this classification to the anaemias of pregnancy, let us first consider some of the changes taking place during gestation which may favour the development of anaemic states.

Physiological Anaemia.

It has recently been shown by Diekman, Wegner, and others that pregnancy is associated with an increase in plasma volume as well as a total increase in red blood cells and haemoglobin; but as the increase in plasma volume is greater than the increase in the other two, these last are relatively decreased. By ordinary methods of estimation there is therefore an apparent anaemia affecting both haemoglobin and red cells so that the haemoglobin is decreased by 20-30 per cent during the period from the 26th-35th weeks of pregnancy. It may be stated then that figures for Haemoglobin as low as 70% and red cells as low as 4 million constitute the physiological anaemia of pregnancy and cannot be considered as abnormal. A reduction of haemoglobin below 70% constitutes an anaemia. Undoubtedly this hydraemia aids in the gaseous interchange between mother and foetus and allow for the relatively great loss of blood during labor.

Great stress is placed nowadays on the role played by nutritional factors in the causation of anaemias. In pregnancy, because the mother is giving her own body to the formation of her child, there is a wide field for the development of

nutritional deficiencies. This has been long recognized in the case of Calcium, and the need for an adequate calcium intake during gestation has been stressed by many obstetricians. When we consider blood formation during pregnancy we must recognize such facts as the requirements of the foetus for large quantities of maternal iron, the frequent capriciousness of appetite for iron-rich foods, and the frequency with which gastric function is temporarily deranged. Thus anaemia may arise during pregnancy and any pre-existing tendency towards anaemia is likely to be exaggerated during this time.

The fact that a severe type of macrocytic anaemia similar to Pernicious anaemia, occasionally arises during pregnancy, has led Strauss and Castle to make an extensive study of gastric function during the various stages of pregnancy. They found that in about 75% of pregnant women, the amount of hydrochloric acid secreted fell well below normal during the latter half of pregnancy and that many of these showed a temporary achlorhydria. They further demonstrated that patients who developed a Pernicious Anaemia of pregnancy showed a temporary absence of intrinsic factor from the gastric juice. Following delivery the gastric secretion in such cases returned to normal.

Classification of Anaemias of Pregnancy.

(1) Hypochromic Anaemias. (Iron deficiency).
   (a) Idiopathic Hypochromic Anaemia complicated by pregnancy.
   (b) Hypochromic Anaemia induced by pregnancy.

(2) Macrocytic Anaemias. (Due to deficiency of Antianemic factor).
   (a) Macrocytic anaemias complicated by pregnancy.
   (b) Macrocytic anaemias induced by pregnancy.

(3) Hypoplastic Anaemias.

(4) The Acute Haemolytic Anaemia of Lederer.

(5) Secondary Anaemias complicated by Pregnancy. Septicaemia, malignancy, nephritis, etc.

(1) *Hypochromic Anaemias.*

The great majority of cases of anaemia occuring in pregnancy belong to the hypochromic microcytic group. However every case must be thoroughly investigated to determine the exact type and an analysis made of the underlying causative factors. Lyons and others have shown that about 30% of pregnant women of the hospital class exhibit some degree of iron deficiency anaemia. A recent study by Bethell carried out on 66 pregnant women and a control series of 50 healthy non pregnant women of the same age, showed that 70% of the pregnant subjects gave blood values too low to be accounted by normal increase in blood volume. They also showed that many of the control group while they had no actual anaemia, had a relatively low colour index and a decrease in cell size. They postulate that this latter group represent women who have a relative iron deficiency which would appear as anaemia during the strain of pregnancy, and suggest that the lack of iron may be recognized before the actual development of anaemia by the presence of a lowered colour index or cells of less than normal size. In such cases the administration of inorganic iron in adequate dosage is indicated.

In the same paper these authors demonstrate that a certain group of anaemias, which have a normal colour index and normal cell size, are not due to iron deficiency but to a lowered intake of animal protein, and that they fail to respond to iron but promptly return to normal by adjusting the protein intake.

Hypochromic anaemia therefore probably represents the exaggeration of a latent iron deficiency due to the stress of pregnancy. Several factors are involved here.

(1) The large amount of iron required by the foetus. It is known, for instance, that the liver of the foetus contains five times more iron than the adult liver and that over ⅔ of this iron is laid down during the last three months of pregnancy.

(2) The diets of pregnant women are frequently deficient in iron and in animal protein due to a common disinclination for meat and fresh vegetables.

(3) There is usually an alteration in gastric function during the last trimester with the frequent development of complete achlorhydria thus favouring the non-absorption of iron. Any or all of these factors at work in a woman who has already a tendency toward iron deficiency may easily bring about anaemia.

These facts explain why most of these anaemias appear about the seventh month.

Most of these anaemias recover spontaneously after delivery, but with frequently repeated child-births a state of permanent iron deficiency may be induced.

Most hypochromic anaemias during gestation respond to adequate iron dosage either as Blauds 90 gr. daily or Iron and Ammonium Citrate gr. 40 t.i.d. The above discussion would suggest that all pregnant women should be encouraged to eat adequate amounts of animal protein despite the mythical connection with albumin in the urine. Those who suggest a latent iron deficiency as shown by low colour index and microcytoses should be given prophylactic doses of iron during gestation.

Except in the most severe cases the prognosis is good and labour usually uneventful without undue haemorrhage. However in untreated cases of any degree, miscarriage is common. The newborn child of anaemic mothers not only have a normal blood count but as shown by Strean and Gottlieb usually exhibit an intensification of the usual polycythaemia, probably induced by the relatively greater degree of anoxaemia present

in the foetal circulation. Strauss in 1933 however, demonstrated that children born of anaemic mothers although normal at birth develop an anaemia during the first year of life, and that this anaemia could be prevented by the administration of iron.

Macrocytic Anaemia of Pregnancy.

Macrocytic anaemias complicated by pregnancy are rare in this climate. In the tropics the more frequent occurrence of nutritional macrocytic anaemia renders it a dangerous complication of pregnancy. True Pernicious anaemia complicated by pregnancy is rare because the age incidence is such that women with pernicious anaemia are usually incapable of bearing children.

The true macrocytic anaemia which is induced by pregnancy although distinctly uncommon has been known for a long time because of its severity. Channing described it in 1842 and Osler included "a severe anaemia of pregnancy" in his classification. With modern methods of study and classification this form can be clearly distinguished from the hypochromic forms. Haematologically this anaemia is almost indistinguishable from true Pernicious anaemia—showing a high colour index and some degree of macrocytosis, with a slightly raised icterus index. The anaemia arises fairly early in pregnancy but is usaully well tolerated until the 6th-8th months when serious symptoms of collapse, oedema, albuminuria appear suddenly with a sharp increase in the degree of anaemia. Occasionally collapse does not occur until after delivery. Premature labour is usual in untreated patients and fever is usual. The combination of fever, oedema, and albuminuria with pallor sometimes leads to the erroneous diagnosis of nephritis, or toxaemia.

The cause of this form of anaemia is not haemolysis as formerly supposed, but as demonstrated by Strauss and Castle, to a temporary absence of Intrinsic factor from the gastric secretion. If the patient is untreated and survives delivery, spontaneous recovery is usual as the gastric secretion returns to normal during the puerperium. If the anaemia is recognized during gestation, treatment with intramuscular liver is indicated and should be carried out energetically. If collapse is sudden and severe at term, blood transfusion combined with the intramuscular injection of large amounts of potent liver extract are indicated. In most cases liver therapy may be discontinued after delivery, but in a few the defect in gastric secretion may persist for months requiring continued treatment. These latter cases are usually classified as Hypoplastic suggesting that actual hypoplasia of the marrow has been induced by pregnancy.

Acute Haemolytic Anaemia of Lederer.

Rarely a true haemolytic anaemia may occur in pregnancy which is indentical with the Anaemia of Lederer. It is marked by fever, constitutional disturbance, leukocytosis. An indirect Vanden Bergh and raised icterus occurs, with marked reticulocytosis and other signs of regeneration. The response of this type of anaemia to transfusion is dramatic.

Lastly anaemias arising in pregnancy from complicating factor such as cancer, nephritis, syphilis, etc., must be carefully separated from the true anaemias of pregnancy. During the puerperium infections with Streptococci or Staphylococci may cause severe anaemias which must be recognized by the overwhelming evidences of infection.

In conclusion, each case of anaemia arising during pregnancy must be carefully classified and treated accordingly. Patients with evidences of iron deficiency must be treated with preventive doses of iron, and the diet adjusted in every case to include adequate amounts of animal protein and fresh vegetable and other foods containing Vitamines and iron. Every pregnant woman should have haematological studies made as part of pre-natal care, especially during the last trimester. Infants born of anaemic mothers should be observed during the first year for evidences of anaemia, and if such anaemia is discovered, iron therapy should be instituted.

Medicine is an art, but it is an art which is always trying to become a science.—*Lindsay.*

Special Articles and Association Notes

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Annual Meeting

To the Editor, The Review.

Dear Sir:

Will you kindly give me a little space in "The Review" to say something to the medical profession of Manitoba regarding the forthcoming Annual Meeting of the Manitoba Medical Association?

This meeting is taking place May 20th, 21st and 22nd. The programme has had much time and endeavor put into it to have one worth while, and the result is good. There will be something for everyone, and much for many, depending on the ability to absorb.

The papers will be worth while—very much so! And the clinical part of the programme has much material for demonstration, and this will be fully used. Apart from the scientific end there are other matters requiring discussion, and time and opportunity are being provided for this. Come in and have discussed whatever you have on your mind needing airing. Or haven't you the nerve? Believe me all who attend will be just as human as you are and will be glad to see you, and hear you, and help you.

We will expect you—in large numbers.

Yours sincerely,

GEO. CLINGAN,
President.

Minutes of Executive Meeting

Minutes of a Meeting of the Executive of the Manitoba Medical Association held in the Medical Arts Club Rooms on Wednesday, April 14th, 1937, at 6.30 p.m.

Present.

Dr. Geo. Clingan, Chairman	Dr. O. C. Trainor
Dr. F. W. Jackson	Dr. F. G. McGuinness
Dr. W. E. R. Coad	Dr. E. S. Moorhead
Dr. R. F. Yule	Dr. S. G. Herbert
Dr. P. H. T. Thorlakson	Dr. W. G. Campbell
Dr. C. W. Burns	Dr. M. R. MacCharles
Dr. J. D. Adamson	Dr. W. S. Peters

Following luncheon, the President called the meeting to order and the Secretary read the minutes of the last Executive meeting held on January 27th, 1937, which were approved.

Report of Programme Committee.

The Secretary passed copies of a tentative programme to the members present, and Dr. Burns addressed the meeting and reviewed the various items. Changes were recommended by the Executive and speakers to lead the discussions were chosen.

Dr. Yule advised he believed the country men would be interested in a lecture on Endocrinology, and this was not included on the programme. Dr. Burns is to see Dr. McGuinness in connection with this. Dr. Trainor suggested a demonstration on the reading of x-ray plates, a subject which might be interesting to the profession. It was decided that this be kept in mind and possibly included on the programme next year.

Report of Medical Research Council.

Dr. Burns suggested that this subject be put over for the meantime there being so much other work to take up at this meeting. Dr. Moorhead stated that he believed that this had been shelved at Ottawa for a year. The matter was left in abeyance.

Committees for Annual Meeting.

The following Committees and Chairmen for the Annual Meeting were appointed:

Commercial Exhibits	Dr. F. W. Jackson Mr. J. G. Whitley
Scientific Exhibits	Dr. D. Nicholson Dr. C. Walton Dr. H. M. Edmison Dr. Digby Wheeler
Entertainment, Dinners, etc.	Dr. Digby Wheeler
Hotel, Reception	Dr. P. H. McNulty
Finance	Dr. C. W. Burns
Publicity	Dr. C. W. MacCharles Dr. Ross Mitchell Dr. A. W. S. Hay
Resolutions Committee	Dr. S. G. Herbert Dr. G. S. Fahrni Dr. F. G. McGuinness
Registration	Dr. F. W. Jackson

Re. Telephone.

The question of a telephone for the Association was discussed. Dr. Moorhead advised that a check on the incoming and out-going calls had been made for the month of February, and there was a total of 373 calls, 204 for the Association and 169 for the Sociology Committee.

It was moved by Dr. E. S. Moorhead, seconded by Dr. J. D. Adamson: That a telephone be installed in the Association's office, to be paid half by the Association and half by the Sociology Committee.
—Carried.

Correspondence.

Letter from the Credit Grantors Association was read by the Secretary, and it was moved by Dr. F. G. McGuinness, seconded by Dr. S. G. Herbert: That this letter be filed. —Carried.

Letter was read by the Secretary from the Canadian Medical Association under date of April 12th, attaching communication from the National Research Council asking applications for the S. A. Courtauld Chair of Anatomy in the Middlesex Hospital, University of London. The communication was ordered filed.

The Secretary read a communication from the National Research Council of Ottawa dated April 12th, attaching questionnaire to be completed and returned. The Secretary advised that this could be completed in the office and forwarded to them.

New Business.

Dr. Trainor advised that the Executive of the Winnipeg Medical Society had been informed that under the practice of the Succession Duties Department of the Provincial Government, that it is customary in dealing with estates of deceased doctors that bills receivable are given an arbitrary value for succession duty purposes whether the accounts are collected or not. Following discussion it was decided that this matter be left to the office to ascertain the means whereby value of doctors' accounts receivable are arrived at.

Cancer Study Committee of the Canadian Medical Association.

Dr. Moorhead addressed the meeting in connection with this subject and stated he wished definite instructions or an opinion from Manitoba to take with him to the next Executive Meeting of the Canadian Medical Association.

Dr. Fahrni, who was present at the meeting for the purpose of discussing this subject, stated that he had attended a meeting in Edmonton with Dr. J. S. McEachern, Chairman of the Study Committee on Cancer of the Canadian Medical Association, and he related so far as he knew the particulars in regard to the decision of the Board of Trustees of The King George V. Silver Jubilee Cancer Fund to subsidize the Committee on Cancer of the Canadian Medical Association, in an effort to organize an efficient organization across Canada for the combatting of cancer.

Following Dr. Fahrni's remarks the matter was fully discussed by Drs. MacCharles, Moorhead, Burns and Jackson. Dr. Jackson submitted a proposed resolution which was suggested might be taken as a notice of motion for the next Executive meeting.

> "THAT this Executive is in favor of the formation of a representative national society for combatting cancer, and we believe the Canadian Medical Association should do all in their power to initiate such an organization, and
>
> "THAT any money already turned over to the Canadian Medical Association by the Board of Trustees of the King George V. Silver Jubilee Cancer Fund, should be held in trust and be turned over to the new organization on its formation, and
>
> "THAT the Cancer Relief and Research Institute be the Manitoba body to represent this Association in any national organization."

Following further discussion it was suggested that the Resolutions Committee should deal with this.

Report by Dr. Moorhead.

Dr. Moorhead addressed the meeting and advised as representative on the Executive of the Canadian Medical Association he had received a copy of the survey of the first two years' operation of medical relief in Ontario from the Ontario Medical Association, and in this report it was definitely stated as there was no precedent of the operation of a similar plan elsewhere, it was necessary to devise a system, etc., also mentioning there was no guiding precedent and it was arbitrarily agreed to conduct the experiment, etc.

Dr. Moorhead read a letter which he had drafted to be sent to Dr. Routley as Secretary of the Ontario Medical Association, taking exception to the remarks made, and asked the approval of this Executive. Considerable discussion followed. It was felt that simply drawing it to their attention would be of no avail as Manitoba would get no publicity whatever. The meeting felt it should be published in the Review, as it was pointed out that Manitoba's reports of two years' operation had been sent to the Canadian Medical Association Journal and had never been used. It was pointed out that Dr. Routley, when in Winnipeg over two years ago, and before the initiation of the Ontario Medical Scheme, had met the various members of the Sociology Committee and the Unemployment Relief Department at a meeting with Dr. Harvey and full particulars of the Winnipeg plan were furnished him at that time.

Dr. Jackson stated he had recently been to Washington discussing relief for the purpose of endeavoring to get a grant from the Rockefeller Foundation and in talking to Dr. Ferrell he was astounded when he heard that Manitoba had so much data available, and stated that it was the first intimation he ever had that this was available. Dr. Jackson learned that the Ontario Medical Association had received a grant of $25,000 from them for the Essex county experiment.

The meeting unanimously approved the forwarding of Dr. Moorhead's communication.

Dr. Moorhead then advised that the Executive of the Canadian Medical Association has been run since last October as a correspondence school, there being no meetings in the interval and no meetings of the Executive would be held before June. This is partly explained by the fact that the General Secretary has left Canada to study health insurance plans. A great many questions have come up and the matters were referred to the members of the Executive by letter. Dr. Moorhead then read letters received from Dr. Routley to which replies had been sent, and asked the approval of the Executive.

It was moved by Dr. W. S. Peters, seconded by Dr. O. C. Trainor: That these letters all be approved.
—Carried.

Re. Federation.

Dr. Moorhead then asked what was the viewpoint of the Executive on Federation, as this subject was to be taken up at the Canadian Medical Association meeting in June.

Moved by Dr. Trainor that Dr. Moorhead be instructed to accept the principles of the special report that was brought in last year, and if there is any indication at the meeting of a non compliance with the recommendations made in that report on behalf of the Canadian Medical Association Executive, that his attitude towards federation should be that of non co-operation.

The Secretary then read the minutes of a previous meeting held on September 25th, 1936, that was held when Dr. Routley was here.

Following discussion Dr. Trainor then withdrew his motion and it was moved by Dr. O. C. Trainor, seconded by Dr. F. G. McGuinness: That the Special Committee on Federation of this Executive be asked

to submit a report embodying definite recommendations towards Federation, and if such a report is approved that it serve as instructions to Dr. Moorhead.

Indigent Patients from Municipalities:

Dr. Fahrni addressed the meeting and reported he felt the Legislative Committee should co-operate more with the Hospital Association in legislative matters. At present there was a growing tendency in the municipalities through their officers, either in the person of the Reeve or Secretary or health officials, to give letters to patients guaranteeing hospital accommodation. This has been growing to such an extent that it is almost becoming a racket, individuals are coming in from the country with a letter signed by the Secretary or Reeve with instructions to be admitted to public wards of the hospitals, who are well able to pay their hospital and physician's accounts. It has been explained to them that this letter admits them to the public wards and they have strongly resented this and asked for semi-private or private wards. Evidently these officials are making good fellows of themselves by offering these letters, they not being requested. The Health officers cannot be telephoned as many of the cases he does not even know of the patient coming in at all.

Discussion followed by Dr. Yule and Dr. Trainor spoke explaining fully the details of the Hospital Aid Act and it does not provide for the definition of an "indigent."

It was moved by Dr. F. G. McGuinness, seconded by Dr. J. D. Adamson: That the Legislative Committee take this matter under advisement.

The meeting adjourned at 11.45.

The College of Physicians and Surgeons *of* Manitoba

The College of Physicians and Surgeons of Manitoba requests that all members who have obtained additional degrees or diplomas since their registration, notify the Registrar of the dates and sources from which such distinctions were procured. The reasons for this information should appeal to all licentiates, namely:

1. To maintain our records.
2. For publication purposes.
3. To answer numerous inquiries intelligently.

May I solicit your co-operation?

W. G. CAMPBELL,
Registrar.

Department of Health and Public Welfare

NEWS ITEMS

DANISH PUBLIC HEALTH FRONTIERS

by

ELIZABETH G. PRITCHARD
Office of Public Health Education, U.S.P.H.S.

NOTE: Taken from "The Health Officer" issue of April, 1937, being the official publication of the United States Public Health Service.

SOCIAL MEDICINE

Doctor Madsen described the Danish system of medical care through compulsory sick-benefit clubs, and a related system of economic assistance, old age and invalidity pensions, workmen's compensation and interment funds.

Danish physicians, the majority of whom are on sick-club panels, in general approve and entirely take for granted the present system of medical care in their country. Few, according to Doctor Madsen, would care to return to the system of general private practice.

In illustration of what doctors thinks of sick clubs, he quoted Doctor E. Sylvest, one of Copenhagen's prominent physicians, and a busy panel doctor. Doctor Sylvest is physician for between three and four thousand sick-club patients and their children—a population of from seven to eight thousand people.

"For me, the greatest value of the sick-club system lies in the fact that there is practically nothing pecuniary between my patients and me," said this family doctor.

"With a perfectly easy conscience, I can call a patient up to me as often as I wish. If I have a suspicion that a patient has an incipient cancer of the uterus, I can examine her every week without expense to her. If the diagnosing of the case is beyond me, I send her to the specialist. If he cannot manage it, I send her to the hospital for biopsy and microscopy; if the diagnosis is definite, she is either operated on or sent to a radium station. And none of this costs her a cent.

"If I get a patient with a fracture, I can either set it myself or let one of the sick-club surgeons do it. I can have it x-rayed before and after setting. Any massage is of course paid for by the sick-club, this treatment being given either at the large massage clinics or in the patient's home.

"If I have a patient with pernicious anemia or diabetes, his blood is examined as often as I wish at our laboratory. If I want to work scientifically with my patients, the laboratory is at my disposal.

"At night I sleep easily, for I know that every part of the town has its young duty-doctor from 8 p.m. to 8 a.m. I receive extra pay for my Sunday work, and if I want to be free on Sunday—and all of us who have enough to do will want that—I refer patients to the Sunday duty-doctor.

"The relations between my patients and me rest upon mutual confidence. If the patient is dissatisfied with me, he can get another doctor without my feelings hurt about it, for I hear nothing of it. If I am dissatisfied with a patient, I can get rid of him through the sick-club.

"In Denmark the working panel doctors belong to the well-to-do class. A panel doctor, prior to the depression, with 2,000 adult members received 18,000 kronen a year—the same as the salary of a Danish cabinet member. Now the payment is somewhat lower, but the doctors receive extra payment for certain services. To enable a comparison of these fees, I should say that only two per cent. of the men in Denmark between 40 and 50 years of age have an annual income of over 20,000 kronen.

"As far as possible, I try to keep clear of patients who are not on the panel. Brought up from my youth as a panel doctor, I have the feeling that the conditions under which the private practitioner works are both unsatisfactory and unworthy of the medical profession. The criticism previously made by doctors against the sick-clubs has now died away after these doctors have become panel doctors, as practically all Danish doctors now are.

"That the patients are satisfied with conditions is beyond all discussion."

Medical education and the majority of the hospitals in Denmark are responsibilities of the State. Combine with this the system of medical care in operation, and it is easy to appreciate the high degree of professional ability and medical care afforded to the Danish population. According to Doctor Madsen, hospitals have been so greatly improved throughout the country, and the number of able physicians in rural areas has so greatly increased, that today "I wouldn't be afraid to be operated on for appendicitis in any part of my country."

COMMUNICABLE DISEASES REPORTED

Urban and Rural - March, 1937.

Occurring in the Municipalities of:

Measles: Total 307—Winnipeg 231, Grandview Rural 32, Souris 13, Grandview Town 11, McCreary 4, Argyle 1, Brandon 1, Cameron 1, Kildonan East 1, Lakeview 1, Lawrence 1, Morris Rural 1, Portage Rural 1, Sifton 1, St. Boniface 1 (Late Reported: February, Grandview Rural 4, Brandon 1, Lac du Bonnet 1).

Influenza: Total 199—Argyle 173, Winnipeg 4, Brooklands 1, St. Boniface 1, St. James 1 (Late Reported: January, Unorganized 2, Armstrong 1, DeSalaberry 1, Franklin 1, Montcalm 1, Norfolk South 1, Louise 1, Portage Rural 1, Rhineland 1, Rockwood 1, Rosedale 1, Rossburn 1, Stonewall 1, St. Andrews 1, Ste. Rose 1; February, Flin Flon 1).

Scarlet Fever: Total 191—Winnipeg 81, Unorganized 13, Kildonan East 11, Norfolk North 8, Macdonald 7, Roland 6, Rockwood 5, St. Boniface 5, Lawrence 3, Rhineland 3, Selkirk 3, St. James 3, St. Vital 3, Thompson 3, Portage Rural 2, Roblin Town 2, Shell River 2, Stonewall 2, Morden 2, Bifrost 1, Brandon 1, Dufferin 1, Gretna 1, Hanover 1, Morris Town 1, Rosser 1, Russell 1, Stanley 1, St. Paul West 1, Transcona 1 (Late Reported: February, Pembina 7, Unorganized 3, St. James 2, Morris Town 1, Roblin Town 1, Stonewall 1, Whitewater 1).

Chickenpox: Total 125—Winnipeg 51, Brandon 21, Oak Lake 10, Unorganized 9, Dauphin Town 7, Kildonan East 5, Sifton 4, Flin Flon 2, St. Boniface 2, St. James 2, The Pas 2, Grey 1, Oakland 1, Roland 1, St. Vital 1 (Late Reported: February, Dauphin Town 2, Lawrence 2, Siglunes 1, Brandon 1).

Whooping Cough: Total 107—Winnipeg 80, Unorganized 16, Kildonan East 3, St. Vital 2, St. James 1 (Late Reported: February, St. James 2, Tuxedo 2, Unorganized 1).

Mumps: Total 51—Winnipeg 27, Boissevain 5, St. Boniface 4, Arthur 1, Brandon 1, Kildonan East 1, St. James 1, St. Vital 1 (Late Reported: January, Unorganized 1; February, Brooklands 1, St. Boniface 1, St. Vital 1, Unorganized 6).

Tuberculosis: Total 45—Winnipeg 19, Brandon 2, Cartier 2, Lawrence 2, St. James 2, Transcona 2, Unorganized 2, Bifrost 1, Coldwell 1, Daly 1, Flin Flon 1, Gilbert Plains Village 1, Grey 1, Miniota 1, Morris Rural 1, Portage City 1, Rosedale 1, Selkirk 1, St. Boniface 1, St. Laurent 1, The Pas 1.

German Measles: Total 13—Roland 13.

Erysipelas: Total 9—Winnipeg 7, Morden 1, Portage City 1.

Diphtheria: Total 7—Winnipeg 4, Shell River 1, Stanley 1 (Late Reported: February, Ellice 1).

Diphtheria Carriers: Total 1—Winnipeg 1.

Venereal Disease: Total 134—Gonorrhoea 109, Syphilis 25.

DEATHS FROM ALL CAUSES IN MANITOBA
For the Month of February, 1937.

URBAN—Cancer 33, Pneumonia 27, Influenza 23, Tuberculosis 12, Lethargic Encephalitis 1, all others under 1 year 2, all other causes 180, Stillbirths 9. Total 287.

RURAL—Influenza 45, Pneumonia 39, Cancer 21, Tuberculosis 11, Diphtheria 2, Infantile Paralysis 1, Typhoid Fever 1, Lethargic Encephalitis 1, all others under 1 year 8, all other causes 168, Stillbirths 9. Total 306.

INDIAN—Influenza 16, Tuberculosis 14, Pneumonia 4, all others under 1 year 3, all other causes 8, Stillbirths 1. Total 46.

SULPHONAMIDE-P B.D.H.

Sulphonamide-p is the name given by The B.D.H. to para-aminobenzene-sulphonamide, which substance has been made experimentally in The B.D.H. Laboratories for some time past; latterly a process has been developed for its manufacture in a state of purity on an industrial scale. During the experimental stages attention was paid particularly to its production in a pure state, and a paper on this aspect of the subject, by a member of the staff of The B.D.H. analytical laboratory, was published in the Quarterly Journal of Pharmacy and Pharmacology, Vol. IX., No. 3, 1936, pp. 560-566.

Para-amino-benzene-sulphonamide was first described under the name Sulphonamide-p in the Lancet of December 12, 1936, p. 1443. Clinical evidence shows that this substance possesses remarkable bacteriostatic and bactericidal activity against haemolytic streptococci even when administered orally.

It is employed in the treatment of puerperal septicaemia and erysipelas and in other conditions due to infections of haemolytic streptococci such as scarlet fever, tonsillitis, etc. It has also a wide prophylactic use.

Sulphonamide-p B.D.H. is issued in tablets for oral administration each containing 0.5 gramme of the pure substance. The tablets are supplied in bottles of 25 and 100 respectively.

Sulphonamide-p B.D.H., in common with other B.D.H. medical products, is available for clinical use through retail pharmacists. Descriptive leaflet will be sent to physicians on request to The British Drug Houses (Canada) Limited, Terminal Warehouse, Toronto. —Advt.

Medical Library University of Manitoba

Current Medical Literature

British Medical Journal, London—January 16, 1937.

Classification of the Glycosurias. T. H. Oliver, M.D., F.R.C.P. Honorary Physician, Manchester Royal Infirmary.

Direct Bronchoscopic Investigation in Haemoptysis Without Physical or Radiological Manifestations. By John E. G. McGibbon, M.B., B.S., D.L.O. Honorary Laryngologist, Royal Southern Hospital, Liverpool: and E. T. Baker-Bates, M.D., M.R.C.P. Honorary Assistant Physician, Royal Southern Hospital, Liverpool.

The Results of Corneal Transplantation. By J. W. Tudor Thomas, D.Sc., M.D., M.S., F.R.C.S. Honorary Ophthalmic Surgeon, Cardiff Royal Infirmary; Associate Surgeon in Charge of Corneo-Plastic Department, Central London Ophthalmic Hospital.

A New Treatment for Chronic Leucorrhoea. By Aleck Bourne, M.A., M.B., F.R.C.S., F.C.O.G., Obstetric Surgeon to St. Mary's and Southend General Hospitals: L. T. Bond, M.A., M.B., B.Ch., Pathologist to the Southend General Hospital: and K. A. McGarrity, M.B., B.S., Obstetric Registrar, Southend General Hospital (with special plate).

Adherent Fallopian Tube Causing Intestinal Strangulation. By F. M. Collins, M.B., M.Chir., F.R.C.S. Major, Indian Medical Service.

British Medical Journal—January 23, 1937.

Cancer of the Breast. By Cecil Rowntree, F.R.C.S., Senior Surgeon, Royal Cancer Hospital, London.

Variations of Weight During Pregnancy. By M. D. Arwyn Evans, M.D., F.R.C.S., Ed. First Assistant to the Professor of Obstetrics and Gynaecology, Welsh National School of Medicine; Honorary Assistant Gynaecologist to Cardiff Royal Infirmary.

Lupus Vulgaris. With Special Reference to its Treatment with the Finsen-Lomholt Lamp. By Robert Aitken, M.D., F.R.C.P., Ed. Physician to the Skin Department, Royal Infirmary, Edinburgh.

Blood Group Tests in Disputed Paternity. By David Harley, B.Sc., M.B., A.I.C., Asthma Research Council Fellow, Inoculation Department, St. Mary's Hospital: and G. Roche Lynch, O.B.E., M.B., D.P.H., F.I.C. Senior Official Analyst to the Home Office, Director of the Department of Chemical Pathology, and Lecturer on Forensic Medicine, St. Mary's Hospital.

Some Clinical Aspects of the Lymphatic System. By H. A. Harris, M.A., M.D., D.Sc. Professor of Anatomy, University of Cambridge.

British Medical Journal—January 30, 1937.

Lecture on Faints and Fits. By A. Rae Gilchrist, M.D., F.R.C.P., Ed. Assistant Physician, Royal Infirmary, Edinburgh.

An Investigation of Internal Radon Therapy. By F. D. Howitt, C.V.O., M.D., M.R.C.P. Physician to the Department of Physical Medicine, Royal Free Hospital: E. C. Pillman-Williams, M.B.E., M.A., M.B., Chemical Pathologist, Royal Free Hospital: and S. Russ, C.B.E., D.Sc. Barnato Joel Laboratories, Middlesex Hospital.

Psychological Factors in Rheumatism. A Preliminary Study. Part I. By James L. Halliday, M.D., D.P.H. Regional Medical Officer, Department of Health for Scotland.

Plasmodium Ovale Infection Contracted in Different Parts of West and Central Africa. By P. Manson-Bahr, D.S.O., M.D., F.R.C.P. Physician to the Hospital for Tropical Diseases, London: and W. J. Muggleton, Laboratory Technician.

"Rachi-Resistance" and Spinal Anaesthesia. By W. R. Black, M.B., Ch.B. Late House-Surgeon, County Hospital, London: and G. A. Bagot Walters, F.R.C.S., Ed., Lincoln.

The Clinical Journal—April, 1937.

Some General and Remote Consequences of Gastric Disease. By John A. Ryle, M.D., F.R.C.P. Regius Professor of Physics in the University of Cambridge; Consulting Physician to Guy's Hospital.

The Neurological Aspects of Head-Injuries. By Denis Brinton, D.M., Oxon., M.R.C.P. Physician i/c Department of Nervous Diseases, St. Mary's Hospital; Assistant Physician, National Hospital for Nervous Diseases.

Albuminuria. By Reginal Ellis, M.D., M.R.C.P., Honorary Physician, Ancoats Hospital and the Manchester Northern Hospital; Consulting Physician, Withington Hospital, Manchester.

Acute Blood Disorders. By S. J. Hartfall, M.D., M.R.C.P., Hon. Assistant Physician, General Infirmary, Leeds.

Raw Vegetable Diet in Chronic Rheumatic Conditions. By D. C. Hare, M.D., F.R.C.P., C.B.E., Physician, Royal Free Hospital.

Cancrum Oris Following Measles. By L. Helen MacFarlane, M.D., B.S., D.P.H., Lond., Assistant Medical Officer, Western Fever Hospital, Lond.

Edinburgh Medical Journal—March, 1937.

Clinical Notes on Eight Cases of Lymphogranuloma Inguinale (Climatic Bubo) and its Sequelae. By R. C. L. Batchelor, M.A., M.B., D.P.H., F.R.C.S., Ed., Clinical Medical Officer, Edinburgh Corporation Venereal Diseases Scheme; Director, Venereal Diseases Department, Royal Infirmary, Edinburgh; Lecturer in Venereal Diseases, University of Edinburgh.

Clinical Recollections and Reflections. XI.—Vomiting in Infancy. By William Brown, O.B.E., M.B., F.R.C.P., Ed. Physician, Royal Hospital for Sick Children, Aberdeen.

The Value of the Examination of Contacts in Pulmonary Tuberculosis. By George S. Banks, M.B., D.P.H., Tuberculosis Officer, City of Aberdeen.

The Bacteriology of Tuberculous Abdominal Adenitis. By John Smith, M.D., D.Sc., M.R.C.P., D.P.H., Bacteriologist, the City Hospital Laboratory, Aberdeen.

Radiological Aspects of Tuberculous Adenitis of the Abdomen. By David P. Levack, M.B., D.M.R.E. Honorary Radiologist to Aberdeen Royal Infirmary.

Surgical Aspects of Tuberculous Adenitis of the Abdomen. By Wm. Anderson, O.B.E., M.B., F.R.C.S. (Eng. and Ed.), Surgeon, Royal Infirmary, Aberdeen.

General Prognostic Aspects of Tuberculous Adenitis of the Abdomen. By Wm. Brown, O.B.E., M.B., F.R.C.P., Ed. Physician, Royal Hospital for Sick Children, Aberdeen.

The Pharmacology of Some Newer Drugs Employed in Tuberculosis Therapy. By J. M. Johnston, M.D., F.R.C.S., Ed., F.R.S. Ed., Pharmacologist, Department of Health for Scotland.

The Canadian Medical Association Journal—April, 1937.

A Clinical Study of Silicosis. By H. H. Moore, M.D.: and M. J. Kelly, M.D., Timmins, Ontario.

Gastroscopy: Its Indications and Value. By P. H. T. Thorlakson, M.D., C.M., M.R.C.S. (Eng.), F.R.C.S. (C.), Assistant Professor of Surgery, University of Manitoba, Surgeon, Winnipeg General Hospital: and C. B. Stewart, M.D., F.R.C.S. (Edin.), Assistant Urologist, Winnipeg General Hospital, Winnipeg, Manitoba.

Echinococcus Alveolaris (With the Report of a Case). By Elmer James, M.D.: and William Boyd, M.D., M.R.C.P. (Edin.), F.R.C.P. (Lond.), Winnipeg, Manitoba.

Haematemesis Following Appendectomy. By George H. Kitchen, M.D., New York.

Bilateral Congenital Absence of the Radii. By A. E. Harbeson, B.A., M.D., C.M., Department of Anatomy, Queen's University, Kingston, Ont.

Primary Sarcoma of the Uveal Tract (An Analysis of Twenty-Seven Cases). By S. Hanford McKee, B.A., M.D., Montreal, Que.

The Trend of Diabetes in Saskatchewan, 1905 to 1934. By Lillian A. Chase, M.B., Regina, Sask.

Anti-Pneumococcus Serum in Pneumonia. By G. C. Anglin, M.B., F.A.C.P.: and M. H. Brown, B.Sc., M.D., Toronto, Ont.

The Toxaemias of Pregnancy. By Ross Mitchell, M.D., Winnipeg, Man.

A Comparison of Total Hysterectomy Verus Supra-Vaginal Hysterectomy. By The Late John James Mason, B.A., M.D., F.A.C.S., Vancouver.

The Size of the Heart After Coronary Thrombosis. By J. H. Palmer, M.D. (McGill), M.R.C.P. (Lond.), Associate in Medicine, Royal Victoria Hospital, Montreal, Que.

Experimental Arsphenamine Dermatitis: The Influence of Vitamin C in the Production of Arsphenamine Sensitiveness. By Frank E. Cormia, M.D., Montreal, Que.

Oestrogenic Hormones in the Treatment of Vulvo-Vaginitis in Children. By J. Victor Berry, M.D., Ottawa, Ont.

Cysts of the Semilunar Cartilages of the Knee Joint. By D. M. Meekison, M.B. (Tor.), B.Sc., F.A.C.S., Vancouver.

An Additional Note on the Innervation of Tumours. By Horst Oertel, Montreal, Que.

The Lancet—January 30, 1937.

Recent Aids to the Prognosis of Pulmonary Tuberculosis. By R. R. Trail, M.C., M.D., Aberd., F.R.C.P., Lond. Physician to the Royal Chest Hospital and to the Papworth Village Settlement; Late Medical Superintendent to the Edward VII Sanatorium, Midhurst.

The Immunising Potency of Antigenic Components Isolated from Different Strains of Bact. Typhosum. By W. W. C. Topley, H. Raistrick, J. Wilson, M. Stacey, S. W. Challinor, and R. O. J. Clark. (From the London School of Hygiene and Tropical Medicine).

The Immunising Activity of Certain Chemical Fractions Isolated from Haemolytic Streptococci. By T. C. Stamp and E. B. Hendry. (From the London School of Hygiene and Tropical Medicine).

The Treatment of Post-Operative Retention of Urine with Doryl. By J. S. Maxwell, M.B., Edin. Late House Surgeon in the Surgical Unit, Western General Hospital, Edinburgh.

Diagnosis and Treatment of Duodenal Ulcer. By Fletcher McPhedran, M.B., Toronto. Assistant Professor of Medicine in the University of Toronto: and Trevor Owen, M.B., Toronto, M.R.C.P., Lond. Senior Demonstrator in Medicine in the University.
(From the General Medical Clinic, Out-Patient Department, the Toronto General Hospital).

The Use of "Doryl" (Carbaminoylcholine) in Post-Operative and Post-Partum Retention of Urine. By Chasser Moir, M.D., F.R.C.S., Edin., F.C.O.G. Reader in Obstetrics and Gynaecology in the University of London, at the British Post-Graduate Medical School.

Rider's Bone. (Report of a Case). By A. Moore, M.B., Lond.

The Lancet—February 6, 1937.

Genito-Urinary Tuberculosis. (With a review of 100 cases). By Frank Harvey, F.R.C.S., Edin. Consulting Surgeon to St. Anthony's Hospital, Cheam, to St. Michael's Hospital, Hayle, and to Broadmoor Criminal Lunatic Asylum.

A New Factor in the Production and Cure of Certain Macrocytic Anaemias. By Lucy Wills, M.A., Camb., M.B., Lond.: P. W. Clutterbuck, O.B.E., D.Sc., Ph.D., Leeds, F.I.C.: and Barbara D. F. Evans, M.R.C.S., Eng.
(From the Departments of Bacteriology and Biochemistry, London School of Hygiene and Tropical Medicine, and the Pathological Unit, Royal Free Hospital).

Tuberculous Lesions in Association with Genito-Urinary Tuberculosis. By M. C. Wilkinson, M.B., Lond. Medical Superintendent to the Essex County Council Sanatorium, Black Notley.

The Effect of an Anti-Bacteriophage on Typhoid Infection in Mice. By I. N. Asheshov, Joyce Wilson, and W. W. C. Topley.
(From the London School of Hygiene and Tropical Medicine).

Oestradiol Benzoate Therapy in Depressions at the Menopause. By M. S. Jones, M.B., M.R.C.P., Edin., D.P.M. Walter Smith Kay Research Fellow, Edinburgh University: T. N. MacGregor, M.B., F.R.C.S., Edin., M.C.O.G. Crichton Research Scholar and Clinical Tutor in Gynaecology, Royal Infirmary, Edinburgh: and H. Tod, B.Sc., Ph.D. Biochemist, Royal Edinburgh Hospital.
(From the Royal Edinburgh Hospital for Mental and Nervous Disorders, and the Institute of Animal Genetics, Edin. Univ.).

Post-Graduate Medical Journal—February, 1937.
Special Nephritis Number

Classification of Nephritis. By John Gray, M.D. Reader in Pathology, British Post-Graduate Medical School.

Acute and Sub-Acute Nephritis. By Robert Platt, M.D., F.R.C.P. Physician to the Royal Infirmary, Sheffield.

Chronic Nephritis. By A. G. Gibson, M.D., F.R.C.P. Physician to the Radcliffe Infirmary, Oxford.

Nephrosis. By T. Izod Bennett, M.D., F.R.C.P. Physician with charge of Out-Patients, Middlesex Hospital, etc.

Essential Hypertension. By O. L. V. de Wesselow, D.M., F.R.C.P. Professor of Medicine, University of London.

Renal Function Tests in Nephritis and Allied Conditions. By E. C. Dodds, M.V.O., D.Sc., M.D., F.R.C.P. Courtauld Professor of Biochemistry in the University of London: and J. Douglas Robertson, M.D., D.P.H. Clinical Chemical Pathologist to the Middlesex Hospital.

"The Canadian Medical Association Journal"—February, 1937.

"An Apparent Instance of Parathormone Inactivity"—by F. A. L. Mathewson, M.D., and A. T. Cameron, D.Sc., Winnipeg.

"Myxoedema: Errors in Diagnosis and Treatment"—H. D. Kitchen, Winnipeg.
A paper delivered at the Annual Meeting of the Canadian Medical Association, Victoria, June, 1936.

"Epilepsy in General Practice"—by R. G. Armour, M.B., F.R.C.P. (C.), Toronto.

"Hormone Therapy for Ectopic Testes"—by A. W. Farmer, M.D., Toronto.

"Air Embolism of the Uterine Vessels"—
Editorial Comment referring to report by Dr. S. J. Pierce of Brandon (C.M.A.J. December, 1936) and co-incidental report in "The Medical Journal of Australia" of a fatal case following use of soapy water with an enema syringe as an abortifacient. Air was found in the uterine veins and umbilical vessels and also in the right side of the heart and in its superficial vessels. In the case reported by Dr. Pierce, death followed Vaginal Insufflation for the treatment of Trichomonas Vaginalis.

"Prevention and Treatment of Scarlet Fever"—by Frieda H. Fraser, M.B., University of Toronto.

The Practitioner—March, 1937.

Post-Operative Care: Medical Aspects. By A. P. Thomson, M.C., M.D., F.R.C.P., Physician, General Hospital, Birmingham; Consulting Physician to the Children's Hospital, the Ear and Throat Hospital and the Eye Hospital, Birmingham.

Post-Operative Care: Surgical Aspects. By J. R. Learmonth, Ch.M., F.R.C.S.E. Regius Professor of Surgery in the University of Aberdeen; Surgeon, Aberdeen Royal Infirmary.

Post-Operative Care: Anaesthetic Aspects. By I. W. Magill, M.B., D.A. Senior Anaesthetist, Westminster Hospital.

Nervous and Mental Post-Operative Complications. By Anthony Feiling, M.D., F.R.C.P. Physician, St. George's Hospital, the Hospital for Epilepsy and Paralysis, Maida Vale, and the Royal National Orthopaedic Hospital.

Physiotherapy in Post-Operative Convalescence. By James Mennell, M.D. Consulting Physiotherapist and Lecturer to the Massage Training School, St. Thomas's Hospital.

Bed-Sores and Their Treatment. By R. J. McNeill Love, M.S., F.R.C.S. Surgeon, Royal Northern Hospital.

Catheters, and the Avoidance of Sepsis. By Sir W. I. de C Wheeler, M.D. Past President of the Royal College of Surgeons of Ireland; Senior Surgeon, All Saints Hospital; Surgeon, Southend General Hospital.

The Treatment of Sea-Sickness. By John Hill, M.D. Surgeon, R.M.S. Aquitania.

The Treatment of Epilepsy in Children. By Reginald Lightwood, M.D., F.R.C.P. Assistant Physician for Children, Westminster Hospital; Physician to Out-Patients, the Hospital for Sick Children, Great Ormond Street.

The Knee-Jerk in Health and Disease. By Adolphe Abrahams, O.B.E., M.D., F.R.C.P. Physician to Out-Patients, Westminster Hospital; Senior Physician, the Hampstead General Hospital.

General Practice IX.—Litigation. By Robert Forbes, M.B., Ch.B., J.P. Secretary, The Medical Defence Union.